

Certificate Id: 2PAA113857\_ABB\_800xA\_Networks\_DiLi\_5P-1F(LC2)

Category:

**Unmanaged Switch** 

Product Name:

DiLi 5P-1F(LC2)

Vendor:

ABB AB

Certification Test Report:

3BSE081065

Certification reference:

System 800xA Version 4.x, 5.x

Restrictions:

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The certificate states that the product specified above has passed the test towards the specified integration category. The certification has been performed by an official certification center, approved by the official steering body for the Industrial IT Certification.

The basis for the certificate is documented according to the Industrial IT Certification – Document Number 3BSE037356. The certificate is valid for the above mentioned Product versions until the next major release of the certified product or the certification reference system with a major release of the certified product or the reference system, a new certification is required to keep the certificate current.

ABB AB 721 59 Vasteras, Sweden

Date: 2014-10-15

Representative for the official steering body for the Industrial IT Certification

Jenny Sjödahl

# ABB 800xA Networks DiLi 5P-1F(LC2) Industrial<sup>IT</sup> Certification





## **Unmanaged Switch**

The DiLi 5P-1F(LC2) is an unmanaged 5 port (4TX and 1FX) industrial Ethernet switch designed for easy use in heavy duty industrial applications. The unit supports 802.1Q long packets which allows all standard industrial Ethernet protocols to be used.

### Easy to install and use

- Purpose built DIN rail casing with integral clip
- Port auto-negotiation and polarity detection
- Transparent to industrial Ethernet protocols

### Designed for use in harsh industrial applications

- Dual 10 57 VDC power input
- Total galvanic isolation between each cable screen
- IP 21

### Robust for long service life

- 500,000 hours MTBF to MIL-HDBK-217K
- -25 to +70°C (-13 to +158°F) with no moving parts
- Industrial EMC, shock and vibration testing

### Diagnostics and legacy connectivity

- Port mirroring function
- Diagnostic LEDs
- DIP switches to lock port parameters

Certification results and product details are summarized below:

Product Overview	
Family name	800xA Networks
Ethernet TX	4 x RJ-45, 10 Mbit/s or 100 Mbit/s
Ethernet FX	1 x LC, SC or ST connector, 100 Mbit/s
Operating voltage	9.6 – 57.6 VDC
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage & Transport temperature	−25 to +70°C (−13 to +158°F)
Degree of protection	IP 21
Dimension W x H x D	34 x 123 x 121 mm (1.33 x 4.84 x 4.76 in)

Engineering	
Configuration and installation	DIP-switches



## ABB 800xA Networks DiLi 5P-1F(LC2)





## **Designed for Industrial Applications**

The DiLi 5P-1F(LC2) is designed for use in industrial applications

and so has dual power inputs for 10 to 57 VDC operation. Total galvanic isolation between each port is reinforced by the unique isolation provided between each chassis screen helping to avoid ground loop currents. The IP 21 rating ensures that the unit can be installed in locations where condensed water may occur.

Only industrial grade components are used which gives the DiLi 5P-1F(LC2) an MTBF of 500,000 hours and ensures a long service life. A wide operating temperature range of –25 to +70°C (–13 to +158°F) can be achieved with no moving parts. The DiLi 5P-1F(LC2) has been tested both by ABB and external test houses to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments.

Network diagnostics are simplified with the inclusion of port mirroring on one port allowing data flow through the switch to be monitored using a network analyzer. All five ports can have data rate and flow control locked by DIP switch which can eliminate problems with Ethernet equipment that is unable to support auto negotiation.

The ABB 800xA Networks DiLi 5P-1F(LC2) switches closely supports the 800xA Extended Automation System Value Propositions as noted below:

### 800xA Value Proposition Mapping

**✓** 

### Reducing Time to Decision and Action

Easy to use



#### Reducing Risk through High Integrity Automation

- Adapted for Industrial Ethernet
- Mechanical form factor improves lifetime



### Investment Enhancement through Evolution

- Continuation in product development
- Low power consumption DC power supply

